

Doniphan County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors

6/25/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Doniphan County economy.¹

These 17 sectors have a total direct output of approximately **\$124.8 million** and support **477 jobs** in Doniphan County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Doniphan County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	476.7	13.28%	\$37,039,699	16.20%	\$124,790,436
Indirect Effect	95.1	2.65%	\$6,930,170	3.03%	\$14,134,130
Induced Effect	40.2	1.12%	\$3,126,555	1.37%	\$5,795,929
Total Effect	612.0	17.05%	\$47,096,425	20.60%	\$144,720,496

As shown in the above table, agriculture, food, and food processing sectors support **612 jobs**, or **17.05%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 17 agriculture, food, and food processing sectors is approximately **\$47.1 million**, or **20.6% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

1 Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value added = labor income + indirect business taxes + other property type income.

4 GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

5 Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the grain farming sector is the top employer with **149 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Doniphan County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Grain farming	149.3	\$47,312,717
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	134.6	\$13,729,862
Commercial logging	46.7	\$1,354,357
Oilseed farming	44.4	\$39,959,137
Dairy cattle and milk production	28.4	\$9,187,396
Landscape and horticultural services	25.5	\$872,032
Real estate	19.7	\$1,937,753
Wholesale trade	18.0	\$3,431,535
Fertilizer mixing	16.7	\$8,856,877
Truck transportation	11.0	\$1,764,117

The grain farming sector directly contributes approximately **\$47.3 million** to the Doniphan County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Grain farming	149.3	\$47,312,717
Oilseed farming	44.4	\$39,959,137
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	134.6	\$13,729,862
Dairy cattle and milk production	28.4	\$9,187,396
Fertilizer mixing	16.7	\$8,856,877
Wholesale trade	18.0	\$3,431,535
Real estate	19.7	\$1,937,753
Owner-occupied dwellings	0.0	\$1,936,457
Truck transportation	11.0	\$1,764,117
Monetary authorities and depository credit intermediation	7.9	\$1,603,591

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Doniphan County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	44.4	\$39,959,136.96
Grain farming	149.3	\$47,312,717.44
Vegetable and melon farming	0.7	\$116,025.48
Fruit farming	2.4	\$165,827.96
Tree nut farming	0.3	\$40,464.96
Greenhouse, nursery, and floriculture production	0.0	\$4,243.81
All other crop farming	6.3	\$420,847.68
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	134.6	\$13,729,861.26
Dairy cattle and milk production	28.4	\$9,187,396.05
Poultry and egg production	0.5	\$347,125.20
Animal production, except cattle and poultry and eggs	3.5	\$359,757.07
Commercial logging	46.7	\$1,354,357.12
Support activities for agriculture and forestry	10.4	\$546,144.13
Bread and bakery product, except frozen, manufacturing	1.2	\$145,122.86
Sawmills	6.0	\$1,448,540.21
Fertilizer mixing	16.5	\$8,780,835.15
Landscape and horticultural services	25.5	\$872,032.46

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Doniphan County, the retail sector was omitted.